COLGATE & COMPANY JERSEY CITY PLANT: B-7/B-8
(Colgate-Palmolive Company Jersey City Plant: B-7/B-8)
85-89 Hudson Street
Jersey City
Hudson County
New Jersey

HAER No. NJ-71-J

HAER
NJ
9-JERCI,
18J-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Northeast Area Office
National Park Service
U.S. Custom House
200 Chestnut Street
Philadelphia, PA 19106

HAER
NJ
9-JERC1,
18J-

HISTORIC AMERICAN ENGINEERING RECORD

COLGATE & COMPANY JERSEY CITY PLANT: B-7/B-8
(Colgate-Palmolive Company Jersey City Plant: B-7/B-8)

HAER No. NJ-71-J

Location: 85-99 Hudson Street, Jersey City, New Jersey

Present Owner/Occupant: Colgate-Palmolive Company
300 Park Avenue
New York, New York 10022

Present Use: Demolished

Significance: The eight-story industrial structure at 85-99 Hudson Street was significant as the first reinforced concrete structure built in Jersey City, and as the base of the two great Colgate clocks erected in 1908 and 1924. Located near the Exchange Place area of Jersey City, the structure anchored the east end of B Block, the historic core of the Jersey City manufacturing plant. Begun during the firm's centennial year of 1906, the reinforced concrete building had classicized proportions and ornament, and height, color, and circular-headed eighth-floor windows similar to those of the office building immediately to its north (HAER No. NJ-71-A). Colgate & Company designated each half of the structure--built in two closely-spaced episodes--as a separate building, but in structure, design, and interior spaces B-7/B-8 was a single building used for a variety of manufacturing, research, and management purposes c1908-88.

Part I. HISTORICAL INFORMATION*

A. Physical History:

1. Date(s) of erection: 1906-1908 (original plans and drawings cited below; Architects and Builders Magazine 1907, 1908; Hopkins 1908)

2. Architects and Designers: William P. Field, Engineer (Newark, NJ) designed the building; Colgate engineer Warren Davey designed both clocks.

3. Original and subsequent owner(s): Colgate & Company; Colgate-Palmolive-Peet Company; Colgate-Palmolive Company (Hudson County Deed Books 1858, 1875, 1883).

4. Builder, contractor, suppliers:
Dragon Portland Cement: The Lawrence Cement Co.
Metal reinforcement: Expanded Metal & Corrugated Bar Co.(St.Louis)
Iron Castings: H.C. Vogel; Metal frames and sash: Voigtmann & Co.
Flagpoles: Ernest Capelle; Office partitions: Manhattan Office Partition Co.
Doors and Cates: Automatic Door and Cate Co.; Skylights:M.L. Weiss
Watchman's Clocks: Pettes & Randall Co.
Hydraulic elevators: Otis Elevator Co.
hands and movements for the great Colgate clocks: Seth Thomas Clock Company (Thomaston, CT)

5. Original plans and construction: Original drawings and early views clearly indicate the building in 1988 retained its original exterior design and interior structure. Early plans for a ninth floor were abandoned.

6. Alterations and additions:

1910, 1927: pedestrian bridges to A-1 (HAER No. NJ-71-A)
1921: first floor door alterations for freight car transhipment
1922: conveyor/pedestrian bridge to E-1 (HAER No. NJ-71-II)
1926: exterior conveyor from fourth to second floors
c1954: conveyor bridge to F-1 (HAER No. NJ-71-KK)
c1962-68: alterations of elevator shafts and equipment; addition of freight elevator to west exterior

* Capitalized references are photographs included with this documentation, or with other documentation packages for HAER No. NJ-71 and associated structures.

The building was used primarily for laboratory or office space, and toiletry, soap, and detergent finishing operations, requiring equipment relatively small in scale and easy to move. This basic function limited alterations to: a few large conveyor, door, or elevator changes; roof clock and signage changes discussed below; and undocumented alterations of original sash and upper floor office partitions.

B. Historical context:

Colgate & Company purchased eight city lots on which B-7/B-8 eventually stood, at the east end of later B Block, between 1858 and 1883. The firm's 19th-century use of this area, immediately east of the brick soap factory buildings erected c1847-78, is not fully documented. Parts of the B-7 site were occupied by several frame stables and sheds c1860-1906, and by a three-story brick box factory c1885-1906 (Culver 1866; Washington Fire Insurance Company of New York 1872; Hopkins 1873; Bromley 1887; Field 1906, No. 2 [plans]).

Between c1903 and 1906, the Colgate brothers began a large expansion of their plant, erecting buildings similar in size, appearance and material to those built by their father and grandfather. The only significant difference in the early 20th-century structures was the partial use of steel framing in buildings B-3 and B-6 (HAER Nos. NJ-71-F and NJ-71-I). By 1906, the Colgates decided to build a much larger concrete factory building, later known as B-8 (initially called building I or K), and within a few months planned to double the size of the structure with adjacent, essentially identical B-7 (initially, building H or L).

Widespread American industrial use of reinforced concrete was only beginning at this time, and a number of contemporary or later buildings erected at the Jersey City plant before World War I continued to feature brick bearing walls with steel and wood framing, including the corporate offices (HAER Nos. NJ-71-A, NJ-71-M, NJ-71-N, NJ-71-Q). The Colgates, whose decision-making remains undocumented, evidently planned to move their large Perfumery Department from Manhattan to Jersey City. They needed open factory spaces far larger than previously built at the Jersey City plant to consolidate all production of the perfumes and numerous other toilet articles made by this department. The choice of reinforced concrete probably reflects, primarily, this manufacturing demand. However, the firm also celebrated its centennial in 1906, and the erection of a large, distinctive structure just west of the Hudson River--and visible from Manhattan--may have been conceived in part as a announcement of Colgate & Company's continuing success. Colgate engineer Warren Davey began design work in 1906 on the enormous clock and electric sign which made B-7/B-8 an outstanding visual landmark in the Port of New York after their 1908 installation; a larger clock replaced the first one in 1924 (Scott 1924; Davey 1929).

Newark, NJ, engineer William P. Field, who designed most of the Colgate structures built c1903-10, acted as architect and engineer for B-7/B-8. His reinforced concrete structure(s) had the conservative, very large girders, beams, and column capitals often used before mushroom columns and slab floors of uniform thickness emerged after c1910. B-8 was completed first, in 1907, with B-7 and the roof signage with clock erected the following year (Architects and Builders Magazine 1907, 1908).

Colgate & Company moved in its Perfumery Department immediately, introducing women workers to the Jersey City plant for the first time in large numbers. Following its earlier provision of lunchroom facilities to its women workers in Manhattan, the firm established a women's lunchroom and recreation area on the eighth floor of the building. Most of the fourth through seventh floors, and part of the basement, were first used for manufacture of toilet water, dental cream, dental powder, talc, and other items. The first floor was used for shipping and receiving, with the second and third floors possibly used for laundry soap finishing or storage. Some Chemical Laboratory personnel occupied part of the fourth floor (Ball 1931; Krantz 1931; Apperson 1976: 15).

The growth of toilet article sales soon required additional facilities, and in 1915 the Colgates initiated designs of a larger concrete factory west of B Block. With completion of the first parts of G Block in 1916 (HAER No. NJ-71-NN), the Perfumery Department moved out of B-7/B-8 and most of the building was devoted to laundry soap finishing and research. The upper floor lunchroom was reserved for men until both sexes shared a single G Block lunchroom beginning in 1929. The seventh floor was used for a variety of research and quality control laboratories until the opening of K Block in 1952 (HAER No. NJ-71-QQ). The second through sixth floors were devoted largely to OCTAGON laundry soap finishing, packaging, and storage, with the first floor used for storage and shipment of products finished in B-7/B-8, other parts of B Block, and G Block. First-floor conveyors brought boxes of finished products from B-5 and B-6 (HAER Nos. NJ-71-H and NJ-71-I). With completion of E-1 (HAER No. NJ-71-II) and a conveyor bridge linking E-1 and B-7/B-8 in 1922, goods not shipped by rail or truck from the first floor were taken by vertical box conveyors to the fourth floor, for movement into E-1 and/or to the Sussex Street Pier (HAER No. NJ-71-TT). An exterior conveyor added to the Hudson Street side of the building c1926 moved goods from the second to fourth floors (VIEW TO NORTHWEST; Matthews Conveyor Company 1926 [plans]; Jacobs 1931; Lauterbach 1931).

The expansion of synthetic detergent production and research facilities after World War II led to some changes in the use of B-7/B-8, although laundry soap finishing and shipping remained the major activity until c1980. Manufacture and process finishing of liquid detergents occupied most or all of the second through sixth floors c1980-88, with remaining laundry soap operations on parts of the first, second, fifth, and seventh floors. The eighth floor was used primarily for a variety of office purposes after 1929. Research laboratories were moved to K Block c1952, but a laboratory with a battery of washing machines--testing soaps and detergents for washing machines on employee clothes--operated on the first, fourth, and fifth floors at different times c1946-80

(Factory Mutual Engineering Association 1962-79; Colgate-Palmolive Company 1974, 1986; Apperson 1976: 50).

B-7/B-8 was demolished in 1989, after lowering of the 1924 clock for temporary ground-level display, pending re-installation somewhere on the redeveloped Colgate-Palmolive property in the 1990s.

Part II. ARCHITECTURAL INFORMATION

A. General statement:

1. Architectural character: Although strictly utilitarian in purpose, B-7/B-8 presented an exterior of some architectural interest. Bold lines and emphasis, with classicized proportion and ornament, dominated the massive concrete construction. The structure had a tri-partite horizontal division into base, body and attic, and a strong vertical division of bays achieved by the use of piers. The base of the building was composed of the basement and first floor, the body included floors two through six, and the attic consisted of the seventh and eighth floors. Ornament was limited to window composition, simple stepped mouldings, brackets, and the use of company identification logos in relief on the first floor entablatures (VIEW TO SOUTHWEST; VIEW TO NORTHWEST).

2. Condition of fabric: When the structure was surveyed in 1988-89, the condition of the building fabric was excellent.

B. Description of Exterior:

1. Over-all dimensions: The entire structure was 200 by 85 feet (see HAER No. NJ-71-D, Figure 2).

2. Foundations: Pile-supported, reinforced-concrete foundation piers and footings were spaced 14.2 to 16.2 feet north-south, and 19.8 to 20.8 feet east-west. Basement piers, supporting eight floors of columns above, were 31 inches square on stepped pedestals 6.5 feet high with 12-foot-wide bottoms. Fragmentary brick foundations walls, probably from earlier structures, were visible near the northeast corner of B-8 (see HAER No. NJ-71-D, Figure 2).

3. Walls: The York Street and Grand Street facades (north and south, respectively) had four bays; the Hudson Street facade (east) had bays, as did the west or rear facade until construction of the exterior freight elevator c1962 covered the sixth bay from the south. A tri-partite horizontal division of spaces into base, body and attic dictated the classicized structure. The base was composed of the basement and first floor, the body included floors two through six, and the attic was the upper two floors. The exterior was covered with a gray stucco (VIEW TO SOUTHWEST; VIEW TO NORTHWEST; HAER No. NJ-71, EAST HALF OF B BLOCK, VIEW EAST).

Above the base of the building, which was separated from the body by a protruding basement creating a water table effect, was an entablature supported by plain, exaggerated brackets, each attached to a pier. A continuous "architrave" belt course joined these brackets are joined at the top. A plain frieze above, separated from the architrave by a fillet, included relief lettering on the three street facades: COLGATE & CO. SOAPS AND PERFUMES on York Street; 1806 COLGATE AND COMPANY 1906 on Grand Street; and COLGATE AND COMPANY [on B-8]...ESTABLISHED 1806 [on B-7] on the Hudson Street frieze, which was visually dominated by overhead canopies hung immediately below over loading docks. The plain belt course cornice was separated from the frieze by a small fillet. Above the sixth floor was another entablature separating the body of the building from the attic. Here a three-step fillet progression formed the architrave, above which was a recessed blank frieze and a four-step fillet progression for the cornice (VIEW TO SOUTHWEST; VIEW TO NORTHWEST; HAER No. NJ-71, B-7 (LEFT), B-6...NORTH ELEVATIONS).

Three-foot-wide vertical piers dominated the facades and defined the bays. Each window bay was composed of a three-part window grouping separated by 12-inch-wide concrete mullions. Below each window on the first, third through sixth, and eighth floors was an inset panel, within a rectangular panel stretching between piers, resulting in three inset panels within a larger horizontal span. The entablatures below the second and seventh floors filled the corresponding spaces (VIEW TO SOUTHWEST; VIEW TO NORTHWEST).

The vertical piers ended at the eighth floor floorline with a fillet and cove moulding capital. From these pier caps sprang the semi-circular arches of the eighth floor. Each 7.8-foot-high arched window had a three-step moulding progression towards the outside wall. Above each pier, between each pair of windows, was an inset triangle. Above the eighth floor windows was the final entablature, described in Section II.8.B (VIEW TO SOUTHWEST; VIEW TO NORTHWEST).

A metal-clad diagonally-set conveyor housing was attached to the Hudson Street facade, connecting the fourth floor, first bay from the south to the second floor, fifth bay from the south. Pedestrian bridges formerly connected to the office building on the north (fifth and seventh floors, third bay from east; see HAER NO. NJ-71-A). The conveyor/pedestrian bridge to E-1 noted above (HAER NO. NJ-71-II) left B-8 from the fourth floor, fourth bay from west. A later conveyor bridge connected B-8 to the large F-1 warehouse (HAER No. NJ-71-KK) from the fourth floor, third bay from west (Figure 1; VIEW TO SOUTHWEST; VIEW TO NORTHWEST; HAER No. NJ-71, EAST END OF A AND B BLOCKS ON YORK STREET, VIEW EAST; EAST HALF OF B BLOCK, VIEW EAST..).

4. Structural systems, framing: Three rows of eleven reinforced concrete columns rose from the basement piers, corresponding to the exterior arrangement of four-by-twelve bays. Except for square columns on the upper floor, the columns were circular and decreased with height from 2.5 to 1.0 feet in diameter or face. Functionally-splayed capitals supported the massive north-south girders as well the east-west joists; these members corresponded with the concrete wall pilasters separating each window. From the first to eighth floors, the girders ranged in size from 18 by 36 to 12 by 27.5 inches, with corresponding beam sizes of 12 by 30 to 8 by 23.5 inches. Relative to the floor loads, which ranged from 450 to 150 pounds per square foot from first to eight floors, the framing was exceptionally massive. Fields' design was typical of a transitional era in industrial concrete architecture, when brick-and-timber or brick-and-steel mill construction remained a strong influence in concrete framing patterns (FOURTH FLOOR TO SOUTHWEST; HAER No. NJ-71-D, Figure 2; Architects and Builders Magazine 1907: 568).

5. Canopies, platforms, headhouses and balconies: Five-foot-deep concrete canopies ran along the entire Grand Street elevation, and much of the Hudson Street elevation, over truck bays and, on Grand Street, a concrete loading platform. There were four stairway/ elevator headhouses on the roof, built of cement-mortared, plastered, hollow-tile block: one in the southwest and northwest corners; one mid-way along the western wall; and one mid-way along the eastern wall. The largest headhouse, at the southwest corner, was ornamented by three blind arches on its south and west facades, and had a hipped skylight roof of galvanized sheet iron frames and wire-glass. On the west wall of the building in the fifth and ninth bays from the south, there were concrete balconies with metal railings above adjacent buildings, between the fifth or sixth and eighth floors. Metal firestairs led from some of these balconies to the roofs of buildings B-6 and B-9 (HAER Nos. NJ-71-I and NJ-71-K; see HAER No. NJ-71-D, Figure 2; VIEW TO SOUTHWEST; VIEW TO NORTHWEST; VIEW SOUTHEAST OF ROOF CLOCK AND SIGN SUPPORTS; DETAIL TO NORTHEAST OF ROOF CLOCK AND SIGN SUPPORTS, WITH BULKHEAD IN BACKGROUND; HAER NO. NJ-71, EAST HALF OF B BLOCK, VIEW EAST.., and B-7 [LEFT], B-6, AND PART OF B-5 NORTH ELEVATIONS).

6. Vents: Air from the structure vented through air filtration/air conditioning units on the roof.

7. Openings:

a. Doorways and doors: There were utilitarian man-doors in the third bay from the east on York Street, and the first bay from the west on the Grand Street facade. The remaining ground floor openings were truck bays with lift doors, three on Hudson Street and three on Grand Street (VIEW TO SOUTHWEST; VIEW TO NORTHWEST; HAER NO. NJ-71, B-7 [LEFT], B-6, AND PART OF B-5 NORTH ELEVATIONS).

b. Windows: Each window bay of the building consisted of an unequal three-part window grouping separated by plain pilasters, connected at their base by a slightly protruding sill. There were twelve bays across the principal Hudson Street facade and four bays on the north and south facades. Most of the original windows have been infilled with obscure glass block with a single small hopper window for ventilation. The original windows were a combination of steel sash fixed windows, operable casements and double hung pivoting sash. On the west side, the northmost and southmost bays were concrete-infilled along the stairwells (VIEW TO SOUTHWEST; VIEW TO NORTHWEST; HAER NO. NJ-71, EAST HALF OF B BLOCK, VIEW EAST.., and B-7 [LEFT], B-6, AND PART OF B-5 NORTH ELEVATIONS).

8. Roof:

a. Shape, covering: The flat, asphalt and crushed slag covered roof was pierced by stair and elevator bulkheads, and two platforms for air filtration equipment as well as several smaller blowers. The roof also supported the steel framework supporting the Colgate clock and adjoining advertising signage (II.8.c below).

b. Cornice, eaves: The roofline entablature consisted of a three-fillet architrave, a blank frieze, and a protruding cornice belt course of a concave cove moulding topped by a large fillet. The parapet above the entablature was incised with a rectangular outline above each bay (VIEW TO SOUTHWEST; VIEW TO NORTHWEST; HAER NO. NJ-71, EAST HALF OF B BLOCK, VIEW EAST.., and B-7 [LEFT], B-6, AND PART OF B-5 NORTH ELEVATIONS).

c. Framework, clock and signage: A steel framework linked to the building's roof steel reinforcement ran along the entire east side of the roof behind the easternmost bulkhead, supporting the clock and advertising signage. Built of riveted steel lattice girders and angles, with tie rods apparently added after initial construction, the framework was about 20 feet wide and 50 feet high, with a broken-right-angle side

profile. In addition to supporting the clock and signage on its vertical eastern face, the framework included metal ladders and three levels of wood-decked catwalks (VIEW SOUTHEAST OF ROOF CLOCK AND SIGN SUPPORTS; DETAIL TO NORTHEAST OF ROOF CLOCK AND SIGN SUPPORTS, WITH HEADHOUSE IN BACKGROUND).

Although modified through time, the original framework probably supported the two octagonal Colgate clocks, both designed by long-time Colgate engineer Warren Davey and built by Colgate and the Seth Thomas Clock Company. The first clock, erected in 1908 upon completion of the building, was 38 feet in diameter. In 1924, this clock was moved to Colgate & Company's Jeffersonville, Indiana plant, and replaced with the 50-foot-diameter clock which remains in Jersey City. With its aluminum 26-foot minute and 19.5-foot hour hands (a 1955 replacement of the original reinforced plywood hands), the great illuminated dial of stainless steel slats is the largest vertical clock face in the world. The approximately 2-ton movement, controlled by a cuckoo-clock-type master clock in the office building (HAER No. NJ-71-A), was housed in a wooden shelter behind the clock face. A 30-cell B6H Edison Nickel-Iron-Alkaline Storage Battery, in a small masonry shelter on the roof behind the clock, supplied power for the rewinding motors, and for a small motor operating the master clock's pendulum, until replaced c1970 with Exide batteries (VIEW TO SOUTHWEST; VIEW TO NORTHWEST; VIEW SOUTHEAST OF ROOF CLOCK AND SIGN SUPPORTS; Scott 1924; Davey 1929; Storage Battery Power 1958; personal communication, Theodore Mrozinski).

Warren Davey also designed the electric sign supported by the framework, adjacent to, and north of, the clock. For over fifty years after B-7/B-8 was completed, the sign proclaimed:

COLGATE'S

SOAPS PERFUMES

using the same simple slogan seen on the building's concrete frieze, and on signs painted on the office building (HAER No. NJ-71-A) and B-3 (HAER No. NJ-71-F) c1906-10.

C. Description of interior:

1. Floorplans: Except several generations of office or laboratory partition walls on the sixth to eighth floors (mostly removed by 1988-89), all floor layouts were large open areas interrupted by the regularly-placed and elevator and stair housings. There was no interior separation to indicate that the structure was considered two separate buildings. There were single freight elevators

and stairways in the northwest and southwest corners, and mid-way along the east wall, plus a larger freight elevator built mid-way along the west exterior wall c1962. Interior access was through a single door in the west wall of B-7 to B-6 (HAER No. NJ-71-I), and through a single door in the west wall of B-8 to B-9 (HAER NO. NJ-71-K). Exterior access was through three truck bays on both Grand and Hudson Streets and a pedestrian door on Grand Street. Exclusive of the massive beams, floor heights were: basement 10.5 feet; first floor 15 feet; second floor 11.25 feet; third floor 11.5 feet; fourth to sixth and eighth floors 13 feet; and seventh floor 12 feet (see HAER No. NJ-71-D, Figure 2).

2. Stairways: The three stairways, in the northwest and southwest corners and mid-way along the east wall, were built and finished in concrete.

3. Flooring: The concrete slab floors were usually left unfinished. In some areas, where there are small, partitioned office spaces, the floor was covered with linoleum tiles.

4. Wall and ceiling finish: Painted concrete walls and ceilings.

5. Openings:

   a. Doorways and doors: Heavy, metal clad fire doors provided access to the stairways and to the connecting buildings.

   b. Windows: Although most of the original windows were replaced with obscure glass block, some original windows survived in 1988-89 on the fifth through eighth floors. These were steel sash windows with wire or plain glass in a variety of forms, with paired casements and triple pivoting sash predominating. The windows were set directly into undecorated openings in the concrete walls.

6. Industrial and mechanical equipment: Most of the manufacturing processes in B-7/B-8 were finishing operations using relatively portable equipment. All earlier processing equipment was removed by 1988-89, when much of the building was filled with modern equipment for automatically-controlled mixing, filling, and packing of liquid detergent. Ancillary equipment for this process included several continuous-extrusion, plastic bottle blow-molding machines. Conveyors moved finished and partially-finished goods throughout the manufacturing floors, leading to the conveyor bridges which left the building's southeast corner (FOURTH FLOOR TO SOUTHWEST).

Except at the southwest corner, all the building's freight elevators were electric by 1988-89. Some or all of the three original elevators were hydraulic, one of which survived with modifications in the southwest corner. The 33.1-foot-stroke cylinder was 36.9 feet long, with a head between the third and fourth floors (DETAIL OF HYDRAULIC ELEVATOR CYLINDER HEAD TO WEST, BETWEEN THIRD AND FOURTH FLOORS).

D. Site

B7/B-8 spanned the eastern fifth of B Block, Colgate & Company's original factory block, between Grand and York streets one block west of the Hudson River. The large concrete mass of B-7/B-8 contrasted with the complex array of brick structures to the west, and abutted B-6 and B-9 directly (HAER Nos. NJ-71-I and NJ-71-K). The office building (HAER No. NJ-71-A) and the commercial environment of Exchange Place were immediately to the north, and provided the classicized architectural context of this factory building. The twelve-bay length of the eight-story structure provided a striking pedestal for the massive Colgate clock and company sign, which could be seen across the Hudson River in Manhattan. Below the roof, overhead bridges linked B-7/B-8 to other Colgate buildings; on the street, railroad tracks in Hudson Street and the Grand Street loading platforms provided essential links with suppliers and customers.

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

Colgate-Palmolive Company retains linen or blueprint copies of most, though not all, plans and drawings made for B-7/B-8. Drawings listed below pertain to the structure and major equipment elements; some other plans of operating hardware are not listed. As of late 1989, these documents are maintained by the engineering department in the plant's L Block (HAER No. NJ-71-SS). Future researchers should contact the company's Office of Corporate Communications at 300 Park Avenue, New York, NY 10022, for access.

Colgate & Company/Colgate-Palmolive Company

n.d. Plan B-7-Bsm't. [unnumbered]

1921 Details of Proposed Alterations to Doors of 1st Floor B7 & 8 Bldgs to Accommodate 42' Freight Cars. Dwg. No. 2-1831.

1922 Proposed Bridge B8-E-1 Buildings [5 drawings, numbered]:

2-1869 Wind Stresses & Elevation of Steel Bent Front B-8.
2-1870 Framing Plans & Section
2-1871 Elevations & Details
2-1872 Details of Truss T1
2-1873 Details of Truss T2

1948 Field Dimensions in N.E. Gorner of Bldg B-8 for Purpose of Study of Proposed New Elevator. Dwg. No. 2-2852.

1962a Architectural Plans & Elevations - New Elevator B-8. Dwg. No. 2-4771.

1962b New Elevator for B-7 & B-8. Dwg. No. 3-5256

1963 Plan & Elevation/Automatic Hudson St. Elevator at B-8. Dwg. No. 2-4957

1964 Alterations to 7th Fl. Bridge & Stairs B-7-8 to A-1-7. Dwg. No. 2-4975

1965 [no title, no number; relocation of electrical equipment in B-8 & B-9]

1966 Structural Alterations for Hudson St. Elevator B-8 Building. Dwg. No. 2-5291.

1968 Structural Alterations to Exist'g Elevator Shaft Bldg B-8. Dwg. No. 2-5363.

1973 Proposed Seminar Room at B-7-8. Dwg. No. 2-6883.

Field, William P., C.E. [Newark, NJ]
1906-07 Proposed Building I [B-8; 47 drawings, numbered as follows]:

1 Foundation Plan
2 Intersection of North Elevation of Proposed Building "I" with Box Factory
3 First Floor Plan
4 Section Parallel to Hudson Street
5 Section Parallel to Grand Street
6 Grand Street Elevation
7 Hudson Street Elevation
8 North Elevation
9 West Elevation
10 Detail of 1st & 2nd Floor Girders
11 Detail of 3rd, 4th, 5th, 6th, 7th & 8th Floor and Roof Girders
12 Detail of Floor & Roof Beams
13 Detail of Stairs and Elevator Shaft/Grand St. Lower Section
14 Details of Windows & Panels
15 Detail of Gantilever
16 Detail of Grand St. Elevation (Lower)
24 Second Floor Plan
25-30 Third - Eighth Floor Plan[s] [6 drawings]
31 Detail of Stairs & Elevator Shaft Hudson Street Lower Section
33 Detail of Shipping Platform and Shelter
34 [title missing; sections of stair-wells & elevator doors, upper section]
36 Detail of Shipping Doors
37 [title missing; section & detail of stairs]
38 Details of Beams & Girders
39 Detail of Stair Rail
40 Detail of Hangers for Girders
41 Detail of Brackets
42 Detail Base of Column/Elevator Framing
43 Detail of Fire Escapes West Elevation

17 Detail of Grand St. Elevation (Upper)
18 Detail of Hudson St. Elevation (Lower)
19 Detail of Hudson St. Elevation (Upper)
20 Detail of Elevator Pit - Grand Street
21 Detail of Elevator Pit - Hudson Street
22 Detail of Basement
44 Framing Elevator Support Crand St.
44a Skylights Over Head House/Grand Street
46 Roof Plan
48 General Arrangement of Arch Reinforcement/8th Story
50 Elevator Head House/Hudson Street
? [title & number missing; details of beams and girders]
? Typical Floor Plan [no number]

1907a Proposed Buildings "K" and "H" [2 drawings, numbered 51-52]:

51. York and Hudson St. Areaways
52. Concrete Wall and Sidewalk

1907b Proposed Building "K"/Windows 3rd, 4th, & 5th Floors/West Side "K" Building

1907c Building K/Fire Escape

1907d Building K/Proposed Sign Support/Anchor Bolt Holes/Eighth Floor

1907e Buildings K & L/Sections Through Doors of K & L/Also Door Sills

1907f Proposed Building "H" [B-7; 41 drawings, numbered as follows]:

1 Foundation Plan
2 York St. Elevation
3 Hudson St. Elevation
4 West Elevation
5 Section Parallel to York Street
6 Details of Beams
8 Basement Floor Plans
9- First to Eighth Floor Plan[s]
16 [8 drawings]
17 Roof Plan
18 Roof Cirders
19-A Details - Cirder Connections
20 Detail of York St. Elevation
21 Detail of York St. Elevation
22 Detail of Hudson St. Elevation
24 Detail of Stairs & Elevator Shaft/ Lower Section
25 Detail of Stairs & Elevator Shaft/ Upper Section
26 Details of Elevator & Stair Tower & Head House
? Flooring in Elevator Shaft
? Elevator Openings
27 Details of Windows & Panels
28 Diagrams - Circular Windows/ York & Hudson Sts.
28-A Diagrams - Circular Windows/ West Elevation
29 Detail of Fire Escape Balcony Rails & Ladder
30 Detail of Stoop, York Street
32 Detail of Shipping Doors
33 Detail of Door Frames
38 Pipe Thimbles Through Floors
39 Skylights for Shelter Showing Sewer Connections
41 Signs on Elevations
43 Detail of Elevator Door Openings
44 Detail of Stair Tower Openings
45 West Elevation [revised]
49 Details of Reglets on Parapet Wall
51 Skylights for Shelter/Showing Sewer Connections
54 Partial Roof Plan, Showing Columns, Bolts, Etc. for Sign Support

Folander Sheet Metal Co., Inc. [West Caldwell, NJ]
1964 Plan B-7 & 8 - 8th Floor/Ductwork Layout. Dwg. Nos. 421-1, 421-2 [2 drawings]

Mathews Conveyor Company [Ellwood City, PA]
1926 Conveying System for Colgate & Company. Dwg. No. L7476.

Neumann, William, & Sons [Jersey City, NJ]
1950 [set of 17 drawings for modifications to 7th & 8th floors]:

A-1 Building B-8 - 7th Floor Air Conditioning
E-5-2 Building B-7 Electric Wiring Layout 7th Floor & Details
E-6 Building B-8 - Electric Wiring 7th Floor
E-6-2 Building B-8 Electric Wiring Layout 8th Floor
E-7 Buildings B-7 & B-8 Electric Wiring 8th Floor
F-3 Building B-7 & B-8 Sprinklers 7th Floor
F-4 Building B-7 & B-8 Sprinklers 8th Floor
P-5 Building B-7/Piping/6th Floor
P-6 Building B-7/Piping/7th Floor
P-7 Building B-8/Piping/6th Floor
P-8 Building B-8/Piping/7th Floor
S-3 Building B-7 Plumbing 7th Floor
S-4 Building B-8 Plumbing 7th Floor
V-3 Building B-7 Ventilation 7th Floor
V-4 Building B-8 Ventilation 7th Floor
H-4 Buildings B-7 & B-8 Heating 7th Floor
H-5 Buildings B-7 & B-8 Heating 8th Floor

1951 Building B-8-6 Electric Plan. Dwg. No. E10-1.

1952 Buildings B-7 & B-8 Lighting Panel Schedules. Dwg. No. E12-1.

Otis Elevator Company
1907 Hudson St. Elevator. Dwg. No. C-252-2, CP No. 2-1339.

Turnbull Elevator
1965 Dwg. No. 4282-1A-1 [untitled; new variable voltage 7000 lb. elevator]

B. Historic Views:

B-7/B-8 appears prominently in all aerial and most general exterior views taken of the Colgate Jersey City Plant c1908-88, with little discernable exterior alteration except the size of the clock. One of the earliest views appears in Architects and Builders Magazine 1908, cited below. Historic views included with HAER No. NJ-71 show the exterior and interior of the building. The regional prominence of this landmark placed it in many postcard views and newspapers illustrations.

C. Interview:

Colgate-Palmolive Company plant engineer Theodore Mrowzinski provided some information on changes in the clock storage battery source.

D. Bibliography:

1. Primary and unpublished sources:

Colgate-Palmolive Company
1986 Jersey City Plant/Environmental Cleanup Responsibility Act (ECRA) Site Evaluation Submission

Factory Mutual Engineering Association - Factory Mutual System.
1962-79 Colgate-Palmolive Company. "Jersey City Plant." Serial No. 70516-B, Index 29368.

Associated Mutual Insurance Company
1922 Colgate & Co. (Soap and Toilet Supplies). Surveyed November 8, 1922.

Hudson County Deed Books
1853 Vol. 378, p. 518.

1858 Vol. 70, p. 175.

1875 Vol. 280, p. 517.

2. Secondary and published sources:

Architects and Builders Magazine
1907 Two Reinforced Concrete Buildings. August 1907, p. 566-568.

1908 The Colgate Building. July 1908, p. 455.

Davey, Warren
1929 The Colgate Clock, A History. The Pulse I, 9.

Muirhead, Walter C., ed.
1910 Jersey City of Today... Jersey City.

Scott, James M.
1924 The Largest Clock in the World. The Colgate Clock December 1924, pp. 8-12

Storage Battery Power
1958 World's Largest Clock Helps Time-Conscious Commuters Keep on Schedule. June 1958, pp. 11-13.

E. Likely sources not yet investigated:

Building permit records maintained by Colgate-Palmolive Company and/or the City of Jersey City may have information on some 20th-century alterations to B-7/B-8, but will probably add little data not noted somewhere on available plans and drawings.

PART IV. PROJECT INFORMATION

Colgate-Palmolive Company began phasing out its Jersey City operations in 1985, moving them to other company plants. In 1987, the company announced plans to demolish the plant beginning in 1988, and to redevelop the 34-acre site for mixed commercial, residential, and commercial use. Recognizing the plant's historic significance, Colgate-Palmolive donated historical, descriptive, and photographic data on the office building to the Historic American Engineering Record.

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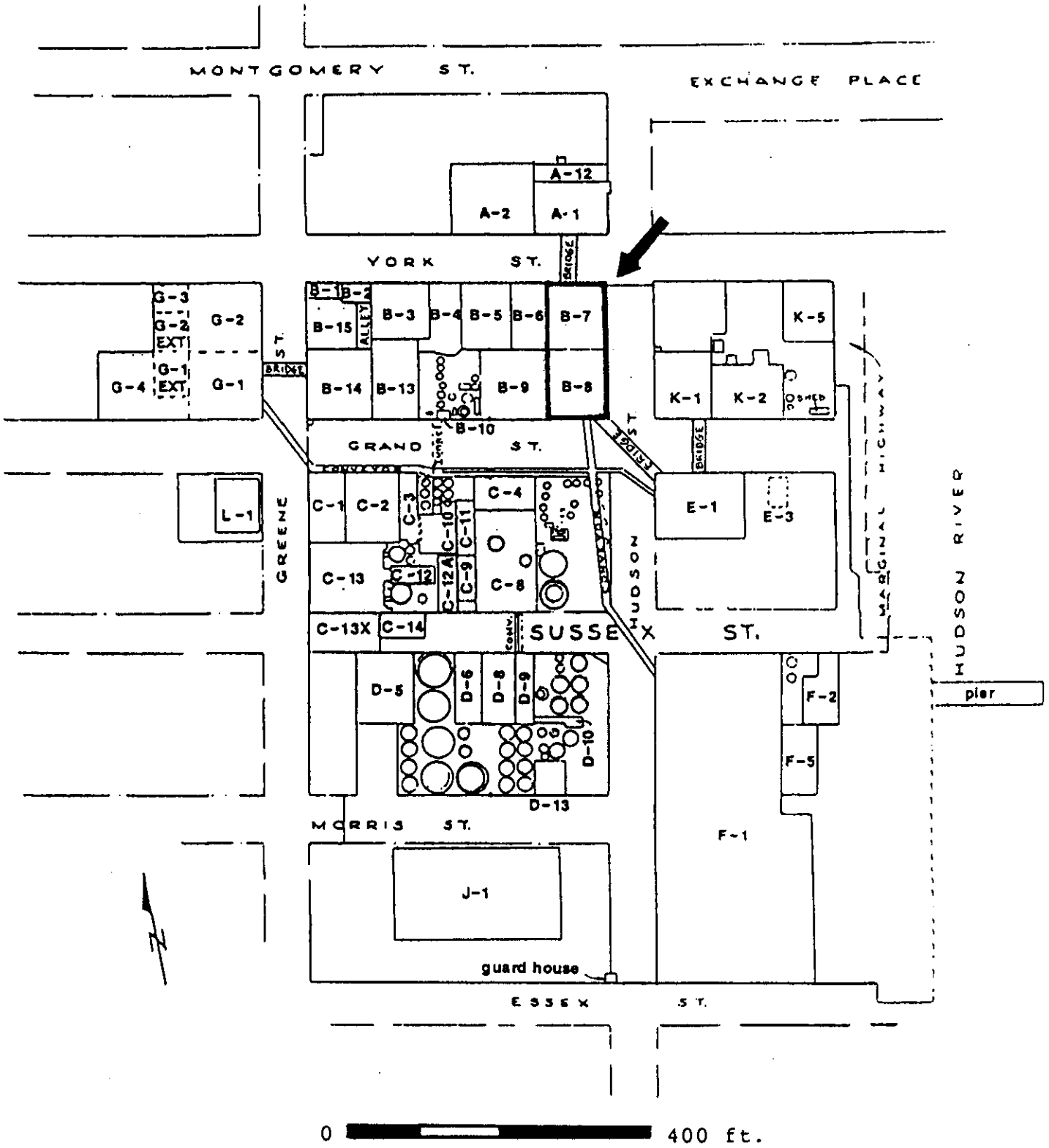

Figure 1. LOCATION OF B-7/B-8 AT COLGATE JERSEY CITY PLANT